DEVOTED TO AGRICULTURE AND ALL ITS VARIOUS KINDRED ARTS AND SCIENCES.

Honor waits, o'er all the earth, The art that calls her harvests forth.—BRYANT.

VOL. I. SATURDAY, MAY 12, 1849. NO. 11.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

PROMPTNESS.

THERE is no calling in which promptness is more important than in that of the cultivator. A great deal depends on doing every thing in the proper season. In vain to him come the various seasons, bringing seed time and harvest, if he be not ready to sow and reap at the proper time. A short delay in planting may affect the crop materially. If the land be naturally rather wet, a delay of one day in sowing, after it is sufficiently dry, and a storm ensuing, may cause a further delay of one or two weeks, in a wet period, and this may cause a late crop, and a failure from rust or blight.

In raising a root crop, a few days of procrastination may extend the time of sowing to the hot, dry season, and the consequence is often a failure of seeds, and the blame, justly due to neglect, may fall upon the seedsman.

A few days too late in destroying weeds, and often the labor will be twice as much; and this delay on one piece of land may cause delay in weeding the whole farm or plantation, and the consequence is, a large increase of labor, and often a depreciation in the crop for want of attention in due season. A farmer informed us that he was once too late in weeding an acre of carrots, and the weeds were so numerous and rank, that he found it the most economical way to plough the land, turn under the weeds, and sow anew.

In harvesting hay or grain, a single hour of delay may cause a loss of more than can be earned in a week. One day too late in gathering transient fruits, and a storm succeeding, the consequence may be the loss of the whole crop.

One day too late in cutting up a field of late corn, and the frost may kill it in the milk, so that it will not be worth harvesting; but if cut up and shocked, the crop might be fair. One day too late in gathering winter fruit, and a frost may destroy a large part. By leaving fruit out one day too late after harvesting, it may be spoiled by cold weather. A little too late in gathering cabbages, potatoes, and other roots, and a hard frost will enclose them, and Winter spread his white mantle over the earth.

A thousand cases may be named in which the farmer suffers great loss by being too late. It is impossible for the cultivator to perform every operation at the very best point of time; but he should endeavor to do it, and make his arrangement so as not to have more work on hand than he can do at the proper season; and he should always consider that one day too late, may be the same as months too late, or forever too late.

THE FRUIT CONVENTION.

We would call the particular attention of our readers to the notice of the North American Pomological Convention, on page 166. These conventions of fruit-growers, from different sections of the country, by bringing together specimens of fruits and discussing their merits, and a conference of the members with each other, afford to those who attend, and to the public at large, peculiar advantages; and we hope that the enterprise will be duly encouraged both by societies and individuals.

By these associations, a new and valuable fruit may be made known to all parts of the country, and soon disseminated and fairly tested; and the question may be settled whether it is adapted to general cultivation, or only suited to particular soils and locations.

APPEARANCE OF FRUIT TREES.

The fruit trees, generally, look remarkably well this spring. The peach-trees and buds are killed less than usual; peaches set on elevated lands, as we have often recommended for this fruit, are very promising this season. As the crop of peaches will be light at the south, and in many parts of the Middle States, this fruit will, in New England, become more important than usual.

The statements made at the State House, by those who had drawn very hasty conclusions from partial observations, have had a bad effect in discouraging the raising of this excellent fruit, which, though uncertain in this section, is worthy of attention, as improvements may be made by selecting hardy varieties, and making a proper selection of location and soil.

ACKNOWLEDGMENTS.

From Mr. O. V. Hills, Leominster, a specimen of apples, medial size, roundish-oblong, mostly red, of a pleasant quality, and remarkable for long keeping. Mr. Hills makes the following remarks on this variety: —

I send you a box of apples: they are called Priest Sweeting by some, and Blue Sweeting by others, in this section. The oldest trees, in this neighborhood, were on the farm of a Mr. Priest; and it may have originated on his place, as I am unable to trace it any farther. This variety is much esteemed as a late-keeping winter sweeting in this vicinity, and there are many bearing trees of it in town. It will keep as long as the Roxbury Russet, and the trees bear bountifully every other year; it bears in even years. Of the flavor of the fruit you can judge on testing it.

Of Mr. Henry Little, East Mansfield, Tough Apple, which he values for its late keeping. As the best specimens were tried by a self-constituted committee, who have made no report, we cannot give an opinion on this fruit.

Of Mr. John Owen, Cambridge, a pleasant apple, a late keeper, raised in that vicinity.

We have had several late apples this season; but as some were rather past their time, and in some cases we had only one or two specimens, and but little information as to their growth, and bearing, and general fairness, we cannot judge of their comparative value, nor how they will compare with other late kinds previously introduced to the public. Our notices may lead to further investigation and trial.

From Colonel Libbeus Chase, Cornish, N. H., a few trees of the Shad Bush, (*Swamp Pyrus,*) in some places called *Sugar Pear*, which are very acceptable, as we wish to try the effect of cultivation on them. We have seen the fruit of this shrub very fine in its wild state, and perhaps it may be improved by cultivation, and become one of the most valuable kinds. Other fruits have been greatly improved by culture, and by seedlings. In some cases, the pear has succeeded well on the Shad Bush, and the subject is worthy of more extensive trials. Reports on trials of this kind will be acceptable.

Of Mr. Salmon Buckminster, Lynn, an early blue potato, from New Hampshire, which he represents as very early. We will give it a fair trial with many other early varieties, and beg leave to report at some future day.

IMPORTANCE OF ROOT CULTURE.

Mr. Editor: As I understand your new publication (the Wool-Grower) is intended for the benefit of the farming community, I propose to give my experience in the use of roots for cattle and hogs.

I grow beets, carrots, ruta bagas, and parsnips, and find there is no difference in the expense of cultivation of either. I find that the sugar beet produces the most milk, and the carrot and ruta bagas are best for fatting.

But the ruta baga is far the best for that purpose, and I am surprised that so valuable a root is not more generally grown in this country. I have fed a farrow cow on ruta bagas and ordinary hay, for two months this winter, and she made good beef, although I milked her a great part of the time; and I have fed a breeding sow on them, and them only, for the last two months, and my neighbors say that she is too fat for breeding. But I consider that the parsnip is a most valuable root for cattle; and hogs prefer them to any other root, and we hear the carrot extolled, but no one grows the parsnip, and yet they are easier to raise, and certainly more valuable. But I am aware that they are a hard root to get up — a general complaint against them. But you can leave them in the ground all the winter, and dig them in the spring, and save housing them, which is no small consideration; and they come in well between hay and grass — the very time that they are wanted.

If any one thinks proper to try them, I know he will not repent it. Sow early, in rows eighteen inches apart, and thin them to eight inches in the rows. Any good wheat soil will suit them.

W. W.

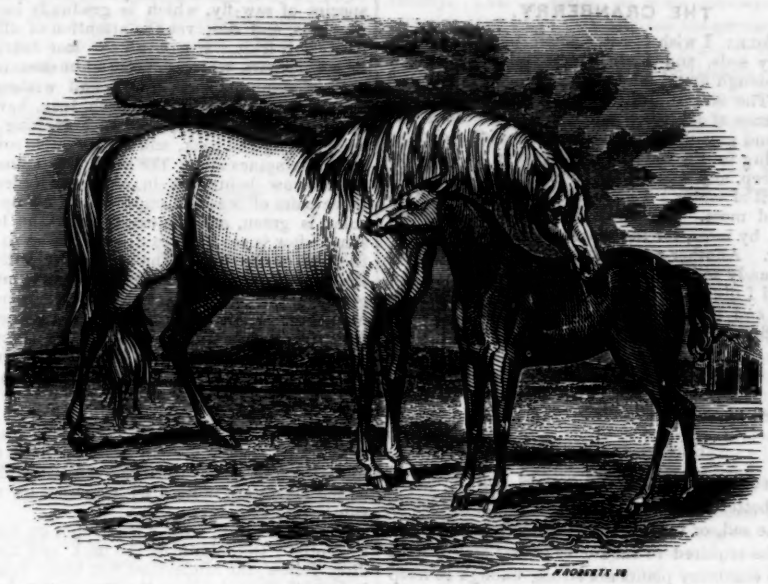
Darien, Genesee Co., N. Y., *Feb.*, 1849.
— *Wool-Grower.*

Remarks by the Editor New England Farmer.

The cultivation of the parsnip, as food for stock, has not been generally tested. It is a hardy plant, and the yield, under good cultivation, is very large. This root is sweet and nutritious, and it is doubtless one of the most valuable for stock. In the Island of Guernsey, England, this root is cultivated very extensively for all kinds of stock, and with excellent success. It grows to a large size, sometimes attaining a yard in length. We hope that more attention will be given to the parsnip, that its true value may be better known.

CURIOUS FACTS IN NATURE.

Almost all animals come into the world covered with clothing adapted to their condition. Man is an exception, because he can clothe himself. He is not, however, the only exception; nor is he the only animal that can clothe itself. The larvæ or grub of that species of moth which is called the "clothes moth," manufactures, as soon as it comes into the world, a coat for itself, of hair or wool, and, for the protection of its tender skin, lines it with silk. This is a curious and singular fact. If this coat were the insect's natural covering, it would grow with the insect's growth; but it is artificial, and some provision, therefore, must be made for its enlargement, as the grub increases in size. If additional length only were required, the task would be easy; the covering being cylindrical, all that would be necessary would, indeed, very easily be effected by adding a ring or two at the top or bottom. But the coat must be widened, and this is an operation which is not so easily performed; but the little insect, as if it had learnt the art of tailoring, accomplishes its object with equal ease and success. It begins, as an experienced workman would do, by making two slits, one on each side, in order to give additional width, and then introduces two slips of the same materials, to fill up the same space; but it foresees, or at least acts as if it foresaw, that if the slits were made on each side from one end to the other at once, the coat would fall off: it proceeds, therefore, with caution, and at first slits its garments on each side only half way down, and, when it has completed the enlargement of that half, proceeds in like manner to enlarge the other. What more could be done by a skilful tailor? And be it observed that this operation is performed, not by imitation, for it never saw the thing done; nor by practice, for it is its first attempt. The facts are curious, and worthy of attention.



"LADY MESSENGER," AND HER COLT, "MORGAN MESSENGER."

The animals represented in the cut are descendants of the famous Messenger and Morgan horses. They were formerly owned, and the colt was bred, by S. W. Jewett, Esq., of Weybridge, Vt. For a few years, these fine animals have been the property of General S. M. Burrows, of Medina, Orleans county, N. Y. The sire of Morgan Messenger is Black Hawk, whose portrait and description are on our 19th page.

The English horse Messenger was imported into this country near the close of the last century. His stock was distinguished as strong and valuable roadsters, and fast trotters, and some of his progeny were eminent as racers. The fame of the Morgan race of horses is well known throughout the country.

The improvement of horses is a subject that receives too little attention. The cheapest sire is often used, and, almost every worthless jade of a mare is used as a breeder, when colts or horses are in good demand.

In many cases, a colt of an excellent race would cost, in the beginning, not more than ten or twelve dollars extra; and this would frequently add fifty or sixty dollars to the value of the full grown animal. Good blood stock will sell, at maturity, more than twice as high as a poor breed. Then it would be good economy to raise the best races only, even if the extra cost, in the beginning, is equal to the expense of keeping the young animal until he is fit for labor.

Why is so little attention paid to horses by our agricultural societies, and why are so few seen at our cattle shows, while the horse is selling in the market at a higher price than any other animal? We seldom see more than half a dozen horses at any of our shows, and frequently there is not one on exhibition. This shows a deficiency somewhere. Either sufficient encouragement is not given for good horses, or there are but few animals worthy of being shown for a premium.

The very high price of good horses should encourage every one who raises this stock to pay great attention to the breed. This would be economy. He should exercise intelligence, and act upon the principles of science, in the beginning, and not depend wholly on hard labor for gain.

EFFECTS OF FOOD AND CLIMATE ON THE HORSE.

If a London dray horse be conveyed to Arabia, and subjected to the same influences to which the native horses of that country are exposed, it will, in the course of some generations, present the leading characters of the Arabian horse. The head will gradually diminish in size, the limbs will become fine and clear, the massive proportions of the whole body will disappear, and not only will the external form of the native horses be acquired, but, along with that, something also of their chivalrous disposition. If the race, thus improved, be again conveyed to Europe, it will gradually deteriorate, and, in the course of some generations, will again acquire all its original properties.

This fact we state upon the authority of Professor Pictet, of Geneva, and it seems to prove that the Arabian horse cannot exist in perfection in any of the western countries of Europe; and there can be but little doubt that the humidity of the climate, and the influences indirectly arising from that cause, are the principal reasons of this change. — *Journal of Agriculture.*

For the New England Farmer.

THE CRANBERRY.

Mr. Cole: I wish to set a small piece of land to cranberry sods, and I wish to be informed if it is best to plough first. The piece is now in grass and moss. The soil is quite retentive of moisture, in consequence of its being underlayed by a hard pan of clay and gravel, about one foot below the surface. A hole dug to the hard pan, say twelve to eighteen inches deep, any time in the summer, will stand two thirds full of water. I have said it is covered with grass and moss. The grass is thin, and its place supplied by moss, for the reason that the soil is full of water. Another part is dry enough for corn, but a poor, sandy soil.

Should I dig holes in the turf and set the vines, or plough, and then set; and if I plough, should I manure first. Any information would be thankfully received.

Respectfully yours,

EDWIN BOOTH.

Springfield, *April* 20, 1849.

Editorial Remarks.

In order to subdue the wild grasses and weeds, it will be better to plough the land and completely invert the sod, or furrow slice. Then much less labor will be required to subdue the grass and weeds, until the cranberry plants are strong enough to keep possession of the ground.

The retention of water a little below the surface is no disadvantage. Cranberries of spontaneous growth are common on marshes, meadows, and on the margin of ponds, where the land is often flowed with water, and where water stands through the season near the surface of the land.

That part that is dry enough for corn, should be manured with peat or mud, to render it more compact and retentive of moisture.

When the cranberry plants can be obtained conveniently, the surest way of transplanting is to take up sods, containing the vines, and set them, sods and all. It is better to make the rows about three feet apart, and set the sods or plants about two feet apart in the row, and the plants will extend over the land much sooner than when set four feet apart each way, as is the practice of some cultivators.

When the land is wet, and composed mostly of peat, mud, or clay, sand is the best manure. Animal or compost manure has not been found profitable for cranberries; and mineral manures would probably be no better. But sand is very useful; and this has often been shown by the superior production of cranberries on wet lands, where sand has been carried down by water from the high lands and deposited around cranberry vines.

For the New England Farmer.

SAW-FLY OF THE RASPBERRY.

Mr. Cole: The season is now approaching when the insect world, awakened from their long sleep by the warm sunshine, will commence their depredations on our fruits and flowers; and all who would see fair fruits, and their gardens and orchards clothed in green verdure, must seek some means of defence against the destroyers.

The raspberry bushes in the vicinity of New Haven have, within a few years, been attacked by a species of saw-fly, which is gradually increasing in numbers, and deserves the attention of all who cultivate this fruit. It eats all the leaf except the ribs or woody part, which makes the bushes, in the first part of summer, look brown and withered. This caterpillar is about half an inch long, having three double rows of short, brown, branching or forked spines along the back, and three double rows of similar white spines along the side; the spines of each double row being set in alternate order. It has three pairs of legs and eight pairs of prop legs; the color is green, and so exactly like the leaf that a sharp view is required to discover it, as it lies along the ribs of the leaf. The caterpillar hatches about the second week in May; it is very minute and greenish white, but grows darker green at each moulting. It leaves the bushes about the time the fruit ripens, goes into the ground, (I have not yet ascertained how deep,) forms around itself an oval coat of earth cemented together, and remains over the winter.

During the first and second weeks in May, the bushes literally swarm with the perfect insect, which deposits its eggs in a small incision close to the ribs underside the leaf. The eggs are easily discovered, as the leaves are dotted with yellow on the upper side where they are.

The fly is black, with a small spot on each side of the collar; the middle of the back and the legs are dirty yellow, the hindermost feet being dusky; there is a small black dot near the tips of the fore wings; length of the body, nearly one fifth; expansion of the wings, one half of an inch. It is easily caught by hand, for when alarmed it remains motionless for a moment.

Some specimens have been sent to Dr. Harris, who says, "It appears to be an undescribed insect. It belongs to the genus *selandria*, and resembles in form and size the saw-fly of the rose, (*selandria blenocampa rosæ*,) but is referable to a different group of the genus, called *hoplocampa* by Hartig, on account of the spines with which the larva is armed. The insect may be named *selandria* (*hoplocampa*) *rubi*, the latter term being given in allusion to the scientific name (*rubus*) of the raspberry."

The *selandria rosæ* has within the last three years increased to an alarming extent. Last summer, the rose bushes, in some gardens, had not a green leaf left upon them. Their owners, through ignorance, attributed it to blighting winds; some thought they were sun-burnt; if they had taken the trouble to examine the leaves, they would have found myriads of disgusting creatures, searing our most beautiful of flowers, like the autumn winds ere the summer's sun had begun to wane.

These slugs are light green and perfectly smooth; so ashes or lime does not readily stick to them: the most effectual mode of destroying them, is to pick them off and crush them, which is a slow, disagreeable process, but sure. The caterpillars of the raspberry may be shaken off by a sudden jar: they are eaten greedily by the chipping sparrow, better known as the chit-bird: therefore it is for our interest as well as pleasure to protect these agreeable little pets, and entice them, by scattering crumbs and seed, to alight about our doors.

GRACE DARLING.

New Haven, Ct., *April* 18, 1849.

Editorial Remarks.

Fortunately for the horticultural community, the family of the late and much lamented Judge Darling took a deep interest in the subjects in which he was engaged, which enables them to communicate

valuable facts from his experience and their own nice observation. On p. 116 is an interesting article from Mrs. Darling on grafting the grape. Miss Darling will oblige us by furnishing drawings of the saw-fly of the raspberry, and any other information on insects that destroy horticultural productions will be acceptable.

For the New England Farmer.

FARMERS' SONS.

Mr. Cole: It is quite too much the case that boys brought up on the farm are required to labor with tools quite ill suited to their age and strength. Farmers are very apt to give their boys implements to work with which have been thrown by as unfit for further use, and altogether too heavy for their strength. I well remember the first time I was set to mowing. It was with an old, worn-out scythe, (heavy enough and long enough for a strong man;) but still I thought it a very pretty notion to mow, even with an *old* scythe. This is one reason why boys dislike farming, and prefer some other kind of business. A farmer might as well attempt to break a colt or a yoke of steers after the same manner, by attaching them to wagons heavy enough for old and well disciplined teams.

Boys at a very early age may be of essential service on a farm, provided they are rightly managed. Their work should be light, and should be performed with light tools. How many boys leave their homes for no other reason than because they are overtasked, and no pains taken to provide for them light and handy implements to work with! Every boy whose father designs him to become a farmer, should, when of suitable age, have his hoe, his shovel, rake, wheelbarrow, and other things necessary for his business. Thus equipped, how proud the little fellows will feel! Each should have his little spot of ground set off to him every spring, to manage and till after his own fashion. How natural for every one to have something he can call his own, and especially boys. If each has his little patch of ground to plant, how much pride he will take in working it! and how much interest will be manifested in the growth of the various crops with which it is planted! To have an interest, boys should have an object; and if farmers would train their *sons* farmers, they should interest themselves in their behalf, encourage them by their assistance and approval; and by so doing, we shall not only have more farmers, but better ones.

A. TODD.

Smithfield, R. I., *April*, 2.

For the New England Farmer.

ON THE VARIETIES OF POTATOES AND PEACHES FROM SEED.

I noticed in No. 1 of your paper some remarks on the different kinds of potatoes raised from the seed, to which I could append some of my experiments, to demonstrate the fact, that there is a way, by which the same, and only the same, kind can be raised from the potato ball, and another way, by which a great variety will be produced; also a similar fact in regard to peach stones, conformably to one of nature's laws.

Yours truly,

BENJAMIN WILLARD.

Wilbraham, Mass.

Editorial Remarks.

We have made but few experiments on raising potatoes from seed; but we usually find a great variety. This is owing, in some measure, to our selecting seed when various kinds are grown together for the purpose of obtaining new kinds by crosses.

It has been stated by some cultivators, that the seeds from the same potato ball or apple will yield different varieties of potatoes. Perhaps the Rev. Mr. Willard will oblige the agricultural community by furnishing facts on this subject. His views on raising peach-trees from the seed will be very acceptable also.

For the New England Farmer.

S. W. Cole, Esq. Dear Sir: I have been trying in vain, for some time past, to find something on the subject of improving, reclaiming, or bringing into English grass, salt marsh or meadow. I have it in my power, with but small outlay, to exclude the salt water from several acres, which is now worth only a nominal value; and, as ploughing seems out of the question, I am in doubt as to the proper plan of procedure. Would fresh water, standing for a length of time, cause the roots to rot? or would sand carted on to the marsh produce any desirable effect? If your experience enables you to give the desired information through the columns of your paper, you will greatly oblige one who sends this, and will perhaps furnish something not altogether unacceptable to some of the rest of your readers.

Very respectfully,

A SUBSCRIBER.

Portland, Me., *May* 2, 1849.

Editorial Remarks.

Some lands in this region, that have been gained from the ocean by diking, are very valuable for tillage and mowing, producing almost every kind of crop common to farming. Draining should follow diking, and then the land will become sufficiently hard and dry to admit of ploughing. On most reclaimed marshes, sand and gravel are necessary, both to render the land drier, and to furnish the proper supply of food for plants, silex or sand being an important ingredient, particularly in corn and other grain. It is this element that gives strength and firmness to the stalk. Liberal manuring is very necessary on reclaimed marshes, as the soil is usually rather moist and cool.

We have made a few general remarks only, and would request our readers, who have experience in the matter, to give detailed accounts of their operations.

For the New England Farmer.

SPENT DYE-STUFF FOR MANURE.

"Are spent dye-stuffs from the manufactories good for manure?" S.

All animal and vegetable substances, properly prepared, are valuable for manure. Dye-stuffs, even the refuse or waste, contain much tannin or astringent principle, that is injurious if applied immediately to the growing vegetable. When this is destroyed or neutralized, and the whole mass becomes decayed, it makes a good manure.

Time will effect the desired object, or, by the use of ashes or lime, and other substances that will

produce heat, and of course a ready decomposition, the process of preparation may be hastened.

For the New England Farmer.

WOOL WASTE FOR MANURE.

"Is wool waste, or the sweepings of the mill, of any value as a fertilizer? It contains some oil, which is said to be valuable for crops."

Waste wool, — well decomposed, which may be effected in a short time by the use of alkalies, and the sooner for its containing oil, and the manure will be the richer for the oil — is a valuable manure. These substances are used by farmers in the vicinity of Lowell with excellent success.

NORTH AMERICAN POMOLOGICAL CONVENTION.

The undersigned, a committee of the above Convention, who were appointed at the meeting held in Buffalo, last September, to report such plans for the organization of future conventions — should it be deemed advisable to hold them — as might be deemed necessary to carry out successfully the objects for which they were to meet, agreed, after consultation, as part of their plan, to appoint committees for each state, territory, and the Canadas, whose duty it should be to report the results of their observations and consultations in relation to matters suggested for their action in a circular, (which was issued by us and sent to each one of them,) on the first day of the assemblage of the Convention, which was, by unanimous resolution, agreed should be held in the autumn of 1849.

The committee have had their attention called to an editorial in the Horticulturist for March, in which it is stated that the North American Pomological Convention is a defunct convention, and that the state committees have received the compliment from a committee which does not exist, or by an authority unknown. Without intending in any way to comment on the article alluded to, the committee think it their duty to remark, that by a perusal of the report of the proceedings of the Buffalo Convention, it will be seen that the report of this committee, making the Convention a national and a permanent one, was adopted unanimously; that it is entirely unconnected with the New York State Agricultural Society, and that the designation of the time and place for its next meeting, where the great fair of that Society is to be held, was done for the better accommodation of the public who are in the habit of attending it from all parts of the country, and also as a compliment to that society, in acknowledgment of the great benefit they had conferred on horticulture, by being the *first* to move in calling a National Pomological Convention. The committee, owing to the hurried close of the Convention at Buffalo, had not time to concoct, or submit fully, their plans for the consideration of the Convention, and in doing it thus far afterwards, they conceive that they are carrying out the true spirit and intent of their appointment, and that their action will meet with the approbation of all concerned.

The committee therefore hope that the gentlemen appointed will not be deterred by the article above alluded to, from attention to the several duties which have been submitted for their action, as the North American Pomological Convention will convene at Syracuse, in the state of New York, on the 14th day of September next, at 10 o'clock, A. M. — it being the day succeeding the closing of the annual fair of the New York State Agricultural Society.

Pomological, horticultural, agricultural, and kindred societies, or associations, throughout this continent, are requested to send delegates to the Convention; and gentlemen resident in vicinities where no societies exist, who take interest in the advancement of pomological science, are also invited to attend.

J. D. G. Nelson, *Indiana, Chairman.*
James Dougall, *Canada.*
Herman Wendell, M. D., *N. York.*
J. C. Holmes, *Michigan.*
Lewis F. Allen, *New York.*
F. R. Elliott, *Ohio.*
N. Goodsell, *New York.*
} *Committee.*

March, 1849.

CIRCULAR.

At the meeting of the Pomological Convention, held at Buffalo, September, 1848, the following resolutions were adopted: —

"*Resolved*, That hereafter an annual assemblage or convention shall be held under the name of the "North American Pomological Convention."

"*Resolved*, That this Convention shall be held, in the coming year of 1849, in the town or city in which the New York State Agricultural Fair may be held — to convene its session the first day succeeding the closing of the Fair — and that the recording secretary of the New York State Agricultural Society shall be intrusted with the charge, and respectfully solicited to give due notice of the time of meeting, by means of agricultural journals, and cards of invitation to gentlemen pomologists and horticultural societies throughout the Union and the Canadas, that they may send delegates, or attend and bring or send specimens of fruits for exhibition."

The annual Show and Fair of the New York State Agricultural Society having been fixed for the 11th, 12th, and 13th of September next, at the city of Syracuse, I do, in compliance with the request contained in the above resolution, hereby give notice of the meeting of the North American Pomological Convention, at the city of Syracuse, on Friday, the 14th of September next — the day succeeding the Show of the New York State Agricultural Society; and on behalf of the said Convention, extend a cordial invitation to yourself to attend, and the Society with which you are connected to send delegates to the Convention, and to forward specimens of fruits for exhibition.

Any fruits that may be sent can be directed to the care of P. N. Rust, Esq., Syracuse.

B. P. Johnson,
Sec. N. Y. State Ag. Society.

Albany, *April* 6, 1849.

DOMESTIC FISH PONDS.

We are surprised our country friends do not pay more attention to the subject of fish ponds. Many of them have, on some part of their estates, either natural ponds, or small streams running through narrow valleys, which may be dammed at a trifling expense, and occupy but a comparatively small surface of land, and which, in many cases, is entirely worthless. These ponds should be fed with living streams or springs. The former are preferable, as they bring to the pond supplies of seeds, vegetables, roots, mud, &c., on which many of the finny tribes subsist. Aquatic plants, insects of various kinds, and *infusoriæ* are also soon generated in the pond, and supply them with an adequate amount of food. Wherever this is deficient for the inmates, artificial food may be added, as bread, decayed grains, vegetables, meat, and the like. They may be soon taught to come at call, as by the tinkling of a bell, the blast of a horn, the beat of a drum, or some musical instru-

ments, and they will thus gather round their food as soon as thrown in. Many species of fish subsist entirely by suction, as the shad, the sucker, &c.; and it is policy to have separate ponds for such of these as may be wanted for use. Others, and by far the larger part, are predatory, and subsist almost entirely on other fish, as the pike, pickerel, &c.; and these require a stock of smaller fry to supply them adequately with food.

Some experiments have been made with the shad and other salt-water fish in acclimatizing them in fresh water, and with entire success. A friend, who has several fish ponds on his estate on the Hudson, says they have bred with him the second year they were placed there. He occasionally supplied them with salt, when they would come about the deposit, and seem to enjoy the brackish water while the salt remained. When deprived of this, some of the original shad died; but whether owing to this or some other cause, it is not certain. The younger ones seem to thrive in water entirely fresh. He has also domesticated several kinds of fresh-water fish, some of which have been imported from the European waters, as the carp and tench; but most of them are the best varieties from our inland lakes. Some of them have become such pets, and so familiarly answer to his call, that he has a great repugnance in preparing them for his table, though his friends, to whom he frequently sends them, have no such scruples, and pronounce them delicious. He tells a good story of harnessing a nine-foot sturgeon, transferred from the river to his domains. He has properly adjusted straps, so fitted as not to interfere with his fins, to which a ring and trace is attached with a light cork buoy, so as always to be within reach. When disposed for a sail, he gets into his canoe, and quietly affixes a tow-line to the buoy; and as soon as the sturgeon feels a jerk, off he darts with railway speed, and whirls him round and round the pond till exhausted, when he rolls over on his back and halts. He is then disengaged from the canoe, and, after recovering from his sweat, bounds into the air six or eight feet, and off he darts for the quiet depths of the pond. Some honest Dutchmen, in his neighborhood, thinking this too good fun to be monopolized, tried the experiment with an untamed sturgeon in the Hudson; when, after a short time, he plunged downwards, drawing under the boat, men and all, who came near being drowned. They cursed their neighbor and his craft, and have never been known to attempt the experiment since. — *American Agriculturist.*

FLAX.

The attention of farmers in one of the agricultural districts in Maine, has lately been turned to the cultivation of flax, in consequence of an offer on the part of some capitalists to establish works in the neighborhood for rotting and dressing the flax. One condition on which the promise to establish such works was based was, that the farmers should agree to sow not less than one hundred acres. These works promised to pay twelve dollars per ton for the straw. Another inducement for its cultivation is a guaranty that the seed will readily sell for a dollar a bushel.

We do not know at what price the straw could be sold for in this valley. It would certainly be a valuable material for making paper, and a farmer at our elbow says that five dollars per ton for it would pay well. The seed would meet a ready sale in St. Louis, in any quantities, at a price varying from eighty-five cents to one dollar per bushel. The demand for linseed oil is very great, and is every year increasing; and a gentleman of this city, who consumes a large amount annually in the manufacture of white lead, assures us that the manufacture of linseed oil in this city is a profitable business, and would be much more so, if the amount of flax seed brought to this market was great enough to permit the manufacture of oil on a much more extended scale.

Will some of our agricultural brethren give us their experience in flax-growing — its cost, its product in seed and straw, and the expense of rotting and dressing? If the straw was dressed for the use of paper-makers only, it would require no very complicated or expensive machinery. — *Valley Farmer.*

RULES IN RAISING POULTRY.

1. All young chickens, ducks, and turkeys, should be kept under cover, out of the weather, during rainy seasons.

2. Twice or thrice a week, pepper, shallots, shives, or garlic should be mixed up with their food.

3. A small lump of assafœtida should be placed in the pan in which their water is given them to drink.

4. Whenever they manifest disease, by the drooping of the wings or any other outward sign of ill-health, a little assafœtida, broken into small lumps, should be mixed with their food.

5. Chickens which are kept from the dunghill while young, seldom have the gapes; therefore it should be the object of those who have the charge of them, so to confine the hens as to preclude their young from the range of barn or stable yards.

6. Should any of the chickens have the gapes, mix up small portions of assafœtida, rhubarb, and pepper, in fresh butter, and give each chicken as much of the mixture as will lie upon one half the bowl of a small teaspoon.

7. For the *pip*, the following treatment is judicious: Take off the indurated covering on the point of the tongue, and give, twice a day, for two or three days, a piece of garlic the size of a pea. If garlic cannot be obtained, onion, shallot, or shives will answer; and if neither of these be convenient, two grains of black pepper, to be given in fresh butter, will answer.

8. For the *snuffles*, the same remedies as for the gapes will be found highly curative; but in addition to them, it will be necessary to melt a little assafœtida in fresh butter, and rub the chicken about the nostrils, taking care to clean them out.

9. Grown-up ducks are sometimes taken off rapidly by convulsions. In such cases, four drops of rhubarb and four grains of cayenne pepper, mixed in fresh butter, should be administered. Last year we lost several by this disease, and this year the same symptoms manifested themselves among them; but we arrested the malady, without losing a single duck, by a dose of the above medicine to such as were ill. One of the ducks was at the time paralyzed, but was thus saved. — *Selected.*

PROGRESS OF AGRICULTURAL IMPROVEMENT.

We have been favored, by Dr. Joseph Stone, with an agricultural address delivered by him before the Hardwick Lyceum, from which we make the following extract: —

But when the rapid progress in the mechanic arts, in our manufactories, and in the application of steam to stationary machinery, and for the purposes of locomotives, are considered, it will at once be seen that, in rapidity of progress, agriculture has by no means kept pace with the subordinate occupations which it sustains.

Perhaps a reason for this may be found in the fact

that vast amounts of capital are invested in manufactories, in steamboats, and in railroads, and the proprietors and managers of these concerns are ever ready to confer a generous and substantial reward for any new improvement which will enhance their profits.

And this prospect of an ample reward stimulates the inventive genius of our countrymen to those ceaseless efforts which we have often seen resulting in surprising success.

But in relation to agriculture, if we except the invention of some useful implements of husbandry, the case is far otherwise. The man who labors and toils for its improvement, cannot go for his reward to rich capitalists, who have millions invested, and who are ready to pay thousands for the invention which shall add but a small percentage to their profits; but instead of this, he will probably be doomed to find his improvements adopted slowly and with many doubtful misgivings, and as a reward for his efforts, he will probably be compelled to rest contented with the satisfaction of doing a good action.

ANTIDOTE TO POISON IVY.

On the 154th page of this volume it is stated that a decoction of poison ivy is a preventive and a remedy against its effects. Mr. Zephaniah Breed, of Ware, N. H., informs us that he has tried it with success; but he recommends a more simple mode of using. He had occasionally been poisoned by this plant, until he practised putting a few of the tender leaves into his mouth, and chewing them, retaining them as a quid of tobacco, as he supposes, not using that vile weed. In this way he has been almost wholly protected against the effects of the poison, they being very slight indeed when he has been among this vine with this precaution.

He had a boy with him who was very liable to be poisoned with ivy, and he found that chewing a few leaves was a preventive. Mr. Breed gives his own experience, not knowing what the effect may be on those who are more subject than himself to injury from this poison vine.

POWER OF THE SOIL TO ABSORB ODORS.

It is well known that onions, if buried in the earth for a few days previous to being cooked, will have lost much of their rank flavor. Wild ducks, which are often too fishy in flavor to be good, may be rendered much more palatable by being wrapped in absorbent paper and buried in the ground for a few hours. Dried codfish loses much of its austerity of flavor (if we may coin a term) by similar treatment. During the plague, in Europe, clothing was often buried for a time to disinfect it. This absorbent property of the soil is due to the presence of carbonaceous matters; for clean sea-beach sand will produce no such results, while pulverized charcoal will act with much greater energy than common soil. On this principle, animal matters coated with unleached ashes, and then buried in pulverulent peat or muck, will not only decompose without giving off offensive odors, but the muck will also, by absorbing the resulting gases arising from decomposition, be rendered highly valuable as a fertilizer. Dr. Dana says that a dead horse, if cut in pieces and treated as above, will render twenty loads of muck equal in quality to the best stable manure. — *Working Farmer.*

PROSPECTS OF THE NEXT CLIP.

The Wool-Grower contains a communication, over the signature of R. L., on this subject.

In regard to the prospect of the "next clip," in Maine, we can tell him it will be a *very small* one.

The sheep have *departed* from our borders. We know of some neighborhoods where, a few years ago, you could find a thousand sheep; now you will not find enough there to supply sufficient wool to make stocking yarn to furnish that same neighborhood.

We can take you into towns where, a few years ago, the woollen factories were buzzing night and day, and giving profitable employment to hundreds of industrious hands; now the spindles are rusting in idleness, and the workmen dispersed. Even those mills that are in operation, turn slowly, and every revolution of the wheel mourns dolefully of hard times.

Such is the prospect of the "next clip" in Maine. These are facts. We say nothing of the causes.

The writer above alluded to estimates, from the statistics and other data of 1840, that there will be, in 1850, thirty millions of sheep in the United States, and that the clip of that year will be seventy millions of pounds, and that the clip of this spring (1849) will be *sixty-six millions* of pounds. He thinks not over one fifth of this will be worked up at home, and that there will be, therefore, upwards of *fifty-three* millions for the manufacturer.

In remarking upon this statement, the editor thinks that the old stock of wool will be pretty well worked up; that the imports will be about fifteen millions of pounds, or say twenty millions. This, with the clip, deducting what will be worked up at home, will give seventy millions for the manufacturer. He then estimates the number of woollen factories in the United States at fifteen hundred; and allowing only two "sets" of machinery to each factory, they will require *two hundred and twenty-five thousand* pounds per day. They will thus work up *sixty-eight* millions during the year, thereby leaving a surplus of two millions "for *lee-way and variation*," as a sailor would say.

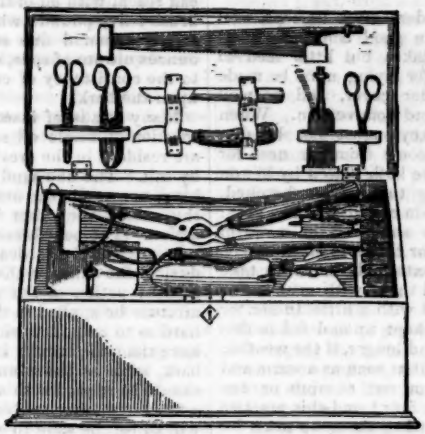
According to the above calculations, it is probable that the clip will all be wanted at home; but the price, as every one knows, must depend upon the price of fabrics, and the condition of the money market.

Without trenching on political ground, we presume we may be allowed to say, that it is unfortunate that the price of the fabric is regulated by the agents of the English manufacturer. Instead of having a home valuation to be attached to foreign fabrics which pay an *ad valorem* duty, — that is, a duty according to its value, — the value is sworn to by foreign agents *as it is in their country*, not in ours; and abundant experience proves that they consider a custom-house oath a mere farce, and the taking a false one there, the least heinous and most pardonable of all mortal sins. — *Maine Farmer.*

VEGETABLE MARROW.

Since the partial failure of the potato crop, the English farmers are turning their attention to the cultivation of this species of squash as food for hogs. Those who have tried it state that twenty tons may be raised per acre, and that when cooked it is found to be superior to most other vegetables as food for hogs. Its nutritive properties are equal to those of the ruta baga turnip. This vegetable is known by various names, such as the *Boston Marrow Squash, Midsummer Squash*, &c. — *Maine Farmer.*

In this region six or eight tons to the acre are considered a large crop. — Ed. of New Eng. Farmer.



HORTICULTURAL TOOL CHEST

This is a small, portable chest, containing a useful collection of tools, such as are generally used in managing trees, shrubs, or plants of any description. These articles are very convenient, and always at hand, when kept in a compact form, and neatly arranged in a chest, which is so light that it can be easily carried in the hand from one part of the garden to another, by the handle at the top. Such arrangement greatly facilitates labor, and aids in executing various operations in the neatest as well as in the most expeditious manner. This chest contains a pruning saw, pruning chisel, weeding hoe, garden rake, tree scraper, scuffle hoe, and hook, all of which are fitted to one handle, which may be screwed together or unscrewed, as required, packed into the chest, and locked up. It also contains twig cutter, vine scissors, flower gatherers, grafting chisel, grafting hammer, strawberry fork, transplanting trowel, weeding trowel, garden rule and line, grass shears, sliding pruning shears, pruning knife, and budding knives.

LABOR IS HONORABLE.

All labor is honorable. The *Great First Cause* works, Nature works, and every man who enjoys her fruits ought to hold it honorable to work. When shall the glorious time dawn that intelligence and true philanthropy shall annihilate the selfish distinction which pride has made between labor and idleness? May that auspicious day soon arrive when the worthless distinctions between mental and physical labor, which separate man from his fellow-man, shall cease to exist, and all the tenants of the earth meet as equal sovereigns of our common inheritance — the earth. — *Rodgers's Scientific Agriculture.*

FRUIT TREES BY ROAD SIDES.

The season for setting out trees has arrived. We would especially call the attention of farmers to setting out fruit trees by the road side. You accomplish two things by so doing. You adorn the country, and make it pleasant for yourself and others who travel that road so adorned. If you select good winter fruit, you will in a few years have from those ornamental trees some profit, inasmuch as the fruit so obtained will come from a source that would otherwise be of no great avail to you. The trees, standing by the side of the wall or fence, will take up but little room, and will not hinder your cultivating the land, if you are so disposed. They will not deprive you of any grass or other crop which you may put upon the ground around them, and their roots, running partly into the road, will draw nourishment therefrom, which would not be of any use otherwise. — *Maine Farmer.*

CAMELS.

A correspondent of the Louisville Democrat proposes the use of the Bactrian camels for travelling to California, New Mexico, and Oregon. They would be very useful for carrying the mail. Good authorities state that they can carry one thousand pounds weight one hundred miles per day for eight or ten days in succession, and subsist on a scanty supply of the coarsest herbage, only requiring water once in two or three days. With the aid of this animal, the United States mail might be carried from St. Louis to Astoria, at the mouth of the Columbia River, in twenty days, or in a shorter time from the mouth of the Arkansas River to the harbor of San Francisco, in California. They could be got in their native country, Asia, and be brought by land to the Black Sea, and shipped for the United States direct.

In addition, it may be said, that the Bactrian or Asiatic camel would be useful in war, in the vast plains of the west. From their great power, quickness of motion, docility, and shape of their backs, they might be useful in carrying light pieces of artillery, and be trained to the use of them for their various purposes. This would be a very effective arm against the Indians. — *Selected.*

Would not the drawing of the plough be more beneficial to mankind than the carrying of a field-piece?

With a downright taste for fruits and flowers, a man may have occupation and amusement for years in a hundred feet square of good soil. — *Downing.*

TURKEYS.

Turkeys intended for breeders must be kept well during the winter. If put in good condition, however, during December, it takes but little feed to keep them so. Their nests for laying must be made with hay or oat straw, under cover, and be well protected from the weather, and from vermin. When incubation commences, turkeys must not be disturbed; and if she does not come from her nest for food and water, she must have both placed by her on the nest. When the young turkeys are hatched, they may be allowed to remain one day in the nest; or, if removed, let them be sheltered in a warm place, and plenty of straw for them to sit upon be provided, for they are now extremely liable to take cold. The second day, feed them with crumbs, or warm clabbered milk, mixed with a little Indian or barley meal. They must be kept up and fed in this way for two or three days, and longer, if the weather should be cold and rainy; but as soon as a warm and pleasant day comes, let them out at nine or ten o'clock, and shut them up at four; and this practice of letting them out and shutting them up must be followed for five or six weeks; and *on no account* let them get wet. When a young turkey begins to droop, there is but little hope for it. There is no danger of keeping them too warm. When they are five or six weeks old, put a little grease on their heads, to preserve them from vermin.

In an article published in the American Agriculturist, from the pen of Mr. Charles Starr, Jr., that gentleman remarks as follows: —

"Heretofore I have had so much difficulty in raising turkeys, as to be almost discouraged, but, of late, have been very successful, in consequence of pursuing the following mode recommended to me by a lady, who said that she had no trouble with them.

"When first hatched, give no food for twenty-four hours; then give a little curd made from buttermilk, increasing the quantity as they grow older. They should then be protected from the wet, and by no means have Indian meal. But with the curd, they may have, in moderate quantities, wheat bread soaked in buttermilk.

"I believe that Indian meal is fatal to the greater part of young turkeys, that die in the attempt to raise them." — *Germantown Telegraph.*

Remarks by Editor New England Farmer.

It is a common error to feed young fowls immediately after being hatched. Any person who has examined eggs in the various stages of incubation, sees at once the folly of this practice; for the last process, before leaving the shell, is the absorption of a good portion of matter by the almost perfect fowl, which serves as nutriment; so that the young fowls, like bees which leave the hive in swarming, have full stomachs to sustain them a day or two; hence, in both cases, that quietness and good humor that generally prevails.

From this wise provision of nature, the chick that first hatches is supported until the last of the brood is ready to leave the shell, which is frequently twenty-four hours later.

CLEANSING THE BARK OF FRUIT TREES.

This operation should be performed in early spring, as well as in midsummer. The rough, loose parts of the bark should be scraped off, as well as moss and other parasites. The bark should then be covered with the following mixture, as high as the operator can reach, with an ordinary long-handled whitewash brush: five pounds whale oil soap, one pound fine salt, one pound fine sand, two pounds potash, two ounces nitrate of soda, dissolved or mixed with water to the consistency of cream, and thoroughly rubbed upon the bark.

Many kinds of insects are kept from trees by a solution of whale oil soap alone, and many such as are resident in the crevices of the bark are destroyed by salt. The fine sand is intended, during the rubbing, to scratch the outer coating of the bark, and thus assist the other ingredients for more perfect action. The potash and nitrate of soda will decompose or soften the dead parts of the bark, so that during the summer they will be thrown off by the healthy action of the growing bark. If the above mixture be applied in dry weather, it will become so hard as to remain during several showers, and thus have time to perform its office. Trees with smooth bark, such as the plum, many of the cherries, &c., should be rubbed with a wet, rough, woollen cloth, in a few hours after applying the mixture: this rubbing will cause the sand to clean the surface so perfectly as to give the bark an improved and more healthy surface. Trees so cleansed are not as likely to be revisited by insects as those left with their natural surfaces, nor are they as likely to become bark-bound. Indeed, we have never known a tree to exhibit the disease called *bark-bound*, the surface of the trunk of which had been softened by a soap wash in early spring. The cherry, apricot, peach, and nectarine are subject, when left to their natural state, to this disease, and it has usually been attributed to too rich or too moist a soil; and underdraining and slitting the bark lengthwise with the knife are the usual remedies. The one is expensive, and often impossible where choice trees are planted, and the other is barbarous and unslightly, causing exhalation of gum and consequent canker. In any case, a few applications of soap to the surface of the part hide-bound will remove the difficulty, and the mixture before recommended may be applied, slightly warmed, when required to soften the bark of a hide-bound tree. — *Working Farmer.*

Remarks by the Editor New England Farmer.

In scraping trees in spring, there should be unusual care, as any injury to the live bark, at this season, is more liable to be permanent in its effects than at a later period. The bark and tree are full of sap in the spring; and when trees are injured, they are liable to turn black and become seriously affected, from the same wounds that would have no unfavorable effect after the tree is growing vigorously, and the sap has been measurably spent in the production of foliage and a new growth of wood. For these reasons, we object to pruning trees in spring, especially when large limbs are to be cut off, which often produces premature decay of the whole tree.

HYBRIDIZATION AND CROSS FECUNDATION OF PLANTS.

Hybridization, strictly speaking, is the art or act of obtaining an offspring or progeny between two different species of animals or plants; and *cross fecundation*, or *cross breeding*, is the production of a progeny or race between varieties of the same species. It was maintained by Buffon, Hunter, and other naturalists of the last century, and is yet assumed by many scientific men of the present day, that the hybrid offspring or progeny of two distinct species

of animals or plants is incapable of begetting or producing its kind; thus making hybridity the test of specific character. From this we may infer that the progeny of hybrid plants cannot produce seed; but that produced by cross fecundation may be regarded as fertile.

The observations and experience of practical gardeners and florists would seem to justify the following maxims, as affording some guide to the production of new varieties or races: —

1. The existence of sexes in plants is now universally acknowledged, as occurring in the same flower — in separate flowers on the same plant or tree — as well as in those of trees distinct from one another.

2. Plants nearly related — that is, closely similar in the structure of their several parts — are those only which will immediately impregnate with each other; but it is impossible, at present, to say what families of plants may or may not be brought into fertile union through intermediate crosses. Not long ago, the azalea and rhododendron were thought to be incapable of such union; but this opinion is now exploded; for the Pontic rhododendron (*R. ponticum*) has been fecundated with the pollen of the Chinese azalea, (*A. sinensis,*) and the progeny between that evergreen and the last named deciduously leaved shrub is the previously unknown phenomenon, a yellow rhododendron. In like manner, the brassicas (cabbages, turnips, &c.) mixed freely with brassicas in all their gradations, as well as the cucurbitaceæ, (melons, pumpkins, gourds, &c.) There are some exceptions, however, to this rule; for the beautiful pelargonium and the scarlet geranium, though nearly allied, according to the classification of modern botanists, have not, hitherto, been able to mix. Again, the raspberry and strawberry are regarded as first cousins; yet, after several attempts, they have not hybridized. The gooseberry and currant, too, are nearly related; still their alliance seems invincible, though tried by skilful hands.

3. The color of the future blossoms (not of those first hybridized) seems to be most influenced, though not invariably, by the male plant, if its seeds and flowers are darker than those of the female. Mr. Knight found, that, when the pollen of a colored blossomed pea was introduced into a white one, the whole of the future seeds were colored. But when the pollen of a white blossom was introduced to the stigma of a colored blossom, the whole of the future seeds were not white. Captain Thurtell, from lengthened observation and experiment, also informs us that he has always found the color and spot of the petals of the pelargonium to be more influenced by the male than by the female plant. On the contrary, however, he observed that the form of the petals follows most closely that of the male plant.

4. Large stature and robustness of habit, according to Mr. Knight, are transmitted to the progeny by either of the parent plants. Therefore it does not absolutely matter, for obtaining this characteristic, whether the plant, male or female, be large; but he generally found that the most robust female plant produced the finest result. When a good fruit or culinary vegetable is wanted, he recommends that the largest seed from the finest fruit or plant, that has ripened earliest and most perfectly, should always be selected. In stone fruits, if two kernels are in one stone, these give birth to inferior plants. The florists of the day, however, are opposed to Mr. Knight in their practice, as regards the hybridization or cross fecundation of ornamental flowers; for they recommend the weakest plants, and those that germinate last, where chastity of form and marking are required, to be taken the greatest care of, as they are sure to produce the most valuable flowers.

Mode of obtaining Varieties. — The most successful mode of obtaining good and very distinct varieties, is to employ the pollen of a male flower, grown on another plant, from a distance, and not that bearing the female, or that in which the fecundation is to take place. When the plants are in flower, carefully extract with a pair of sharp-pointed scissors the anthers, if any, from the female flower from which you intend to produce seed, and also destroy all male flowers, or those having anthers, of the same species that are in the immediate vicinity, before they arrive at maturity, or your attempts will be of no avail; for Nature will have performed her part, and instead of a hybrid, you will have a natural progeny. In order further to avoid previous and undesired impregnation, the flower should be enclosed in a case covered with gauze, and thus continued until the process of hybridization is complete, to exclude insects, and the effects produced by strong currents of air before the desired pollen is ripe. Another effectual mode of preventing undesired impregnation is bringing the female plant into flower a little earlier than its congeners, and removing the anthers, as directed above. For the stigma will remain vigorous, if unimpregnated, for several days.

After extracting the anthers from the flowers you wish to bear seeds, carefully watch the progress of the stigma, and as soon as you find it in a condition to receive the pollen, select the matured anthers from a distance, and bring them in gentle contact with the stigma, to which a sufficient quantity of pollen will adhere. If a double flower should chance to have a fertile anther or two, these should be employed for fertilization, as the flowers of their progeny will almost be sure to be double. Although the fecundity of all the seed in one seed vessel may be secured by applying pollen only to one style, even where there are several, yet the quantity of pollen is by no means a matter of indifference. Koelreuter found, that from fifty to sixty globules of pollen were required to complete the impregnation of one flower of *Hybiscus siriacus;* but in *Mirabilis jalapa*, and *M. Longifolia*, two or three globules were enough; and in the case of pelargoniums, Captain Thurtell says two or three globules are certainly sufficient.

In the course of the process, the seed vessel is not altered in appearance by impregnation from that of another plant; therefore no hasty conclusion of failure is justified by that want of change. It is easy to discern, however, whether the fecundation has been effected; for, when this is the case, the stigmas soon wither. The stigmas which have not received the pollen remain for a long time vigorous and green.

M. Haquin, a distinguished horticulturist at Liege, has impregnated flowers of the azalea with pollen kept six weeks; and camellias with pollen kept sixty-five days. He gathers the stamens just before the opening of the anthers, wraps them in writing paper, places them in a warm room for a day, collects the pollen they emit, and preserves it in sheet lead, in a cool, dry place. Mr. Jackson, of Cross Lane Nursery, near Bedale, states that he found the pollen of *rhododendron Smithii tigrinum* retain its fertilizing power even for twelve months. This property of pollen was verified by experiment, in Persia, by the elder Michaux, as early as the year 1782, in observing that the male flowers of the date (*Phœniz dactylifera*) will keep during the year, and yet impregnate the female.

D. J. B.

New York, *Feb.* 3, 1849.

— *American Agriculturist.*

The right depth and width of the furrow — the right kind and application of the seed — the right times of hoeing, and the right time of harvesting — are all matters depending upon the skill and judgment of the farmer.

Domestic Department.

A Short Chapter on Bread-Making. — At no period of our civil history has so much attention been directed to the best means of sustaining life, as at the present. The partial failure of the cereal and root crops in Europe, together with the rapid increase of their already crowded population, has led the chemist, the political economist, and the philanthropist to a clearer and more accurate investigation of the life-sustaining properties of the various articles commonly used as food.

The term "bread," in the broadest sense, can be applied to the main staple, in the support and nourishment of man; whether it be the "potatoes and point" of the Irishman; the ostrich, the puanacho, or the wild bull of the Buenos Ayrean Guacho; the blubber of the Greenlander; the cassava, banana, or sugar-cane of the West India negro; the hump steak of the prairie hunter. The rice of the gluttonous Siamese, the contents of the ample wallet well filled with dates of the Timbucto merchant, and the rich white bread of the American table, — all are to different individuals but so many different forms of "daily bread."

The French chemists have, by the most patient series of analyses, fixed the utmost alimentary limits of almost every article used as diet. Wheat, above all other things, stands preëminent as an article of food. With us, as a nation, it forms a most important part of life's comfort. The question before me now is as to the best way of deriving the entire nutritious substance of wheat when presented in the form of baked bread. That we fail in gaining the object by the use of fermentatives, such as yeast, leaven, &c., can be easily shown. The intelligent reader need not be told that fermentation cannot take place in any substance that does not contain sugar in large quantities, and in the proportion that sugar predominates will be the activity of the fermentation. In other words, the activity of the fermentation depends upon the strength or ability of the yeast or leaven to change or convert into carbonic acid gas the saccharine contained in the wheat. Experiments in this respect enable me to speak knowingly. The quantity of nutritious matter destroyed in getting what our wives call a "light raise," is as eight to one hundred; or, out of every one hundred pounds of flour, we destroy eight, while the balance is largely injured by the process.

Nor is the practice of raising bread by the use of salæratus any better; indeed, it is infinitely worse. Why are ninety-nine out of every one hundred of the American people afflicted with poor teeth? Solely from the use of salæratus, not "sweet" things, as many suppose. I am confident that the love of gain ought to lead us to abandon the use of the first ingredient, while the love of health, and, above all, a good set of teeth, should induce us to abstain from the use of the latter.

A sweeter and better kind of bread can be made by following the recipe given below. One trial, I am satisfied, will convince any one.

Three cups of flour;

Two teaspoonfuls of cream of tartar;

One teaspoonful of carbonate of soda, dissolved in hot water;

A little salt, and a small piece of butter or lard.

Mix with sweet milk, roll out and bake them quickly. Add a little sugar, and it makes a very nice, healthly cake for children. The same proportions may be carried out to make a large batch of bread.

By placing the bread, when taken from the oven, in a current of sweet, fresh air, it soon recovers the oxygen that was expelled from it while it was in the oven. No bread should ever be eaten while it is hot. It is not fit for the stomach, and will certainly produce derangement, — such as flatulence, acidity, biliousness, &c. It is a want of economy to use warm bread. Many persons will eat three or four warm biscuits, while seldom will they eat more than two when they are cold; and yet the two cold biscuits contain more nourishment than the four warm ones. — *Valley Farmer.*

Stewed Celery. — The Horticulturist recommends highly stewed celery. Cut the blanched or white portion of the celery stalks in pieces about an inch in length, and put them in a saucepan over the fire, with milk and water, in equal proportions, barely sufficient to cover them; add a little salt, and let them stew gently, until perfectly tender. Then take out the celery, add a piece of butter to the liquid it was boiled in, thicken it slightly with flour, pour it over the celery, and serve it up.

Boys' Department.

Utility of Frogs. — I remember somewhere of reading that, many and many years ago, a number of frolicsome boys were one day watching frogs, at the side of a pond, and that, as any of them put their heads above the water, they pelted them down again with stones. One of the frogs, appealing to the humanity of the boys, made this striking observation: "Children, you do not consider that, though this may be sport to you, it is death to us." It is to be feared that the same propensity to maim and torture these poor, innocent reptiles prevails to some extent with the youth at the present day. But this is cruel, wicked, wrong; for the usefulness of frogs about our gardens and fields can scarcely be too highly estimated, as their food consists almost exclusively of worms, slugs, insects, and other small living things, which they seek among the plants and grass on the land.

Frogs, like the toad, it is well known, are hatched from eggs, laid early in the spring in shallow pools or near the edges of sluggish streams, which, when taken together, are called "spawn," and often resemble a mass of boiled sago, sprinkled with a large number of small black dots. The young tadpole, which is hatched from them, passes through several metamorphoses, and at the end of some weeks becomes a "gaping, wide-mouthed, waddling frog." If you examine his tongue, you will observe that, instead of being rooted at the throat, as in other animals, it is fastened to his under lip, with its point directed towards the stomach. Nevertheless, this singular arrangement is well suited to his purposes, for his tongue, as an organ of prehension, is very effective, being flat, soft, and long, and covered with a viscous fluid, which enables him more readily to catch and secure his prey. When he wishes to use it, he lowers his under jaw, ejects and retracts it with the rapidity of light.

Instead of torturing these poor reptiles, it is recommended that every lad in the country give place, in some snug corner in the garden, for a vessel holding a few gallons of water, buried nearly level with the surface of the ground, in which may be put one or more frogs, to be petted and cherished like any other domestic animal, and where its curious and interesting habits may be studied at leisure.

— *Amer. Agriculturist.* RANA.

A Thought for Every Day. — We see not, in this life, the end of human actions — their influence never dies. In every widening circle, it reaches

beyond the grave. Time determines what shall be our condition in that world. Every morning, when we go forth, we lay the moulding hand on our destiny; and every evening, when we have done, we have left a deathless impress upon our character. We touch not a wire but vibrates in eternity – not a voice but reports at the throne of God. Let youth especially think of these things, and let every one remember that in this world, where character is in its formation state, it is a serious thing to think, to speak, to act.

Health.

For the Headache. — Sage tea will often give relief. It is stimulating, causing a rapid circulation of blood in the veins, which relieves the brain from a flow to that organ; it also causes perspiration, when taken freely. With food, sage tea is an excellent substitute for tea or coffee, and by some persons it is preferred as more palatable, without any regard to its healthful effects.

The following is generally a remedy for headache: Open the hair on the patient's head, apply a little fine salt; then apply the palm of the hand, and rub it hard and briskly for a short time; then perform the same operation on another part, passing over the head, particularly that part which is the seat of pain. The cheeks will soon be flushed with heat, and the head relieved. Whether the effect is wholly owing to the friction, that invites the blood outwardly, and relieves the brain from pressure, or whether the salt has a cooling and contractive effect in driving the blood from the brain, we know not. Perhaps it has a favorable effect in both ways. If there be no efficacy in the chemical nature of the salt, sand or sawdust would answer the same purpose of producing irritation by friction.

Champooing the head, as performed by barbers to cleanse the hair and the head of dandruff, will generally cure the headache. They apply some cleansing liquid, — perhaps soap and water would answer, — and then rub hard and thoroughly, and continue the process twenty or thirty minutes; after which the head is dried by rubbing with a towel.

Showering with cold water is a good remedy. In severe cases, let a person ascend to the second or third story of the house, and pour cold water from a pitcher or coffee-pot steadily upon one point of the patient's head.

A teaspoonful of finely powdered charcoal, drank in half a tumbler of water, will, in less than fifteen minutes, give relief to the sick headache, when caused by a superabundance of acid on the stomach.

Dressing Wounds. — Nine times out of ten, a wound will heal quicker if done up in its own blood, than in any other way. As for a burn, whatever will entirely exclude the air the quickest, is the best. Cotton will do this; so will oiled silk, if stuck down at the edges by any kind of sticking salves. Put nothing on a burn to heal it. Nature will soon do that, when the air is excluded, and the pain will almost immediately cease.

Mechanics' Department, Arts, &c.

Wetting Bricks. — Few people, except builders, are aware of the advantages of wetting bricks before laying them. A wall twelve inches thick, built up of good mortar, with brick well soaked, is stronger, in every respect, than one sixteen inches thick built dry. The reason of this is, that if the bricks are saturated with water, they will not abstract from the mortar the moisture which is necessary to its crystallization, and, on the contrary, they will unite chemically with the mortar, and become as solid as a rock. On the other hand, if the bricks are put up dry, they immediately take all the moisture from the mortar, leave it too dry to harden; and the consequence is, that when a building of this description is taken down, or tumbles down of its own accord, the mortar falls from it like so much sand. — *New York Sun.*

The Value of the Barometer. — Torricelli invented, and Pascal perfected, this instrument; and it is of great use, not only in foretelling the changes of the weather, and thus saving the lives of navigators, and preventing the loss of millions of property on the ocean, but also in enabling us readily to ascertain the height of mountains, or any other situation to which it can be taken.

In illustration of the use first mentioned, I am going to tell you an anecdote which I have read of Lord Collingwood, who succeeded Lord Nelson in the command of the British fleet, after Nelson's death, at the battle of Trafalgar, in 1803. Dr. Gray, a surgeon in Lord Collingwood's ship, was very fond of observing the weather, and kept a regular register of it. But his lordship had little or no faith in the barometer, and used to laugh at the doctor for his credulity. The fleet, at one time, was cruising off Sicily, Syracuse, a little before sunset; the weather was very fine, and the sky gave no indications of a change. Dr. Gray, on going to consult his glass, and enter his observations, as usual, was surprised to find that the mercury had fallen nearly an inch. This alarmed him, and he mentioned the fact to Lord Collingwood, who was greatly amused by his anxiety. The doctor, however, urged that the fall was unusually great, and he had no doubt before midnight they would have to encounter a gale, which, though it might not be of long duration, would be extremely heavy. He added, if in this case the glass deceived him, he would admit that it was a false prophet. "Well," said his lordship, smiling, "we will put you on your trial, and you shall have the management of the fleet for once." A signal was accordingly made to prepare for bad weather. One of the captains told Dr. Gray, next day, they were quite at a loss what to make of such an order, as the afternoon was so fine, and the sky so settled. However, before midnight, they all acknowledged the wise foresight of the order, for it blew a hurricane for several hours, which must, had they not been prepared for it, have done them great damage.

Another occasion offered, some time after, to scatter his lordship's doubt. They had gone ashore, and in the morning it blew a heavy gale, which alarmed them greatly for the safety of a little vessel, in which was the son of one of their agents. For some reason, it had been taken in tow by one of the ships, and was in danger of being drawn under the water. The poor father stood, therefore, on the shore, almost distracted. Dr. Gray, however, finding that the mercury in his barometer had risen considerably and very quickly, comforted him, by telling him that he had very little doubt, but that, high as the sea was then, in an hour or two he might go

on board his son's vessel in a boat; and he actually did so.

Thus we see that this instrument, as a prophet of the weather, is of great consequence to the sailor, and carries the records of life and death in its prognostics. Life may be secured to him by the knowledge which it gives; for even an hour's warning of the approach of a storm, gives him time to lower his sails, and render as secure as possible the few frail planks which alone separate him from eternity.

This is certainly the highest use of the barometer, but its other uses are by no means unimportant. The mercury falls when it is carried from any lower to any higher spot, and the degree of falling tells exactly how much air has been left below. Thus, if thirty inches high on the barometer mark the whole pressure at the surface of the ocean, and if the instrument be found, when carried to another place, to stand at only twenty inches, it proves that one third of the atmosphere exists below the level of the new situation.

In carrying a barometer from the level of the Thames to the top of St. Paul's Cathedral, in London, the mercury falls about half an inch, marking an ascent of about five hundred and six feet. On Mont Blanc it falls to half the entire barometric height, marking an elevation of fifteen thousand; and in De Luc's famous balloon ascent, it fell to below twelve inches, indicating an elevation of twenty-one thousand feet — the greatest to which man has ever ascended from the surface of his earthly habitation. — *The Lotus.*

ROBBERIES AMONG BEES.

Bees being robbed are like being destroyed by worms — a kind of secondary matter. Nine cases in ten, the colony is too small to keep sufficient guard. Spring is the only time a man ought to complain of his hives being robbed. An apiarian that allows his hives to be robbed in the fall, is not fit to have charge of them. Business, indolence, or ignorance, is the cause. As soon as the flowers fail, if each hive were examined, and all removed except such as contained plenty of inhabitants, they would defend themselves against all intruders; but weak colonies are often left at the mercy of strong ones, that have no conscientious scruples about taking the last morsel; like some men — the habit of plundering once established, they sometimes attack those that are stronger than themselves, become weakened in consequence, and fall a prey, in turn, to others. Care is necessary at any time through the summer, when honey is scarce; but spring is the most important time. It is then we wish them to form steady, industrious habits. Prevention is better than cure, and evil propensities should be checked in the beginning. At this season, we often have some weak colonies — it is our duty to know which these are; by turning the hive bottom upwards, on a cool morning, we can easily see the number of bees. If we find any much reduced, they must be looked to often, especially the first warm days, and assisted, if necessary. Perhaps there is nothing about the apiary more difficult to determine, than when bees are robbing — nothing is more likely than to be deceived. It is generally supposed, when a number of bees are outside fighting, that they are also robbing, and are often injured by measures taken to prevent it. A show of resistance indicates a strong colony, while weak ones make none, (at least, outside.) To detect the robbers immediately, the closest observation is necessary. Each of these, when leaving the hive, instead of flying in a direct line to its home, will turn its head towards the hive, apparently to mark the spot, and know where to return for another load. Bees, when they first come out in the spring, seem to mark their own hive in the same way; swarms, when first hived, do the same; also, the young bees, the first time they leave home. These may be seen about the middle, or a little after, of each fair day, for about an hour, thicker than at any other time. An unusual number of bees hovering around a hive generally indicates foul play, especially if weak; but it is not conclusive. The young bees may be mistaken for robbers. This is the chief difficulty. Their motions are alike; a little difference in size and color — the young bees a shade lighter. The abdomen of the robbers, when filled with honey, is a little larger. If the apiarian has observed close enough to detect this difference, he can without trouble decide; if not, he can kill some suspicious looking ones, coming out — if filled with honey, they are robbers; or sprinkle some flour on them, and have some one to watch by other hives; or, what is less trouble, but will take longer before they are checked, if they should be robbing, visit them again, after the young bees have had time to get back — if the bustle continues, or has increased, it is time to interfere. Close up the hive, leaving passage for only one bee to pass at a time, (it should be done as soon as we find they are weak;) this will allow all that belong to the hive to get in, and others to get out, and materially retard the robbers. Unless it should be cool, they will work until dark, which they would do whether checked or not. This, by the way, should be another means of deciding the point: visit the hives every warm evening — if any are at work when honest laborers should be home, they need attention. As for remedies, I have tried several. The best, and least trouble, is to remove the weak hive to the cellar, or some cool, dark place, for a few days. They will then, probably, attack the next nearest one; the entrance of this should be closed, allowing just room for the bees at work to pass. If strong, no danger need be apprehended; they may fight and kill some — perhaps a little chastisement is necessary, to remind them of their duty. After three or four warm days, they generally give it up, when the removed hive can be returned to the same stand, and room allowed for only one bee to pass out at a time. Changing the stand, after the bees have marked the location, will often ruin them, unless to a distance of over a mile. If convenient to move them that distance, there would be no danger from a second attack, and would lose no time in the house.

Yours,

M. QUINBY.

COXSACKIE, GREENE CO., N. Y.

— *Philadelphia Dollar Newspaper.*

REMARKS BY THE EDITOR NEW ENGLAND FARMER.

In the northern part of New England, where the warm weather comes on suddenly, and bees can procure food soon after it is warm enough to go abroad, robbing is not common in spring. But in the fall, and in a dry time, the latter part of summer, robberies are common in all parts of the country. We have known cases in midsummer, when it was extremely dry, of late swarms being entirely destitute of honey, and of early or old swarms, which had a good stock of honey, consuming it as fast as in the wintry season. Of course robberies will take place at that time under such circumstances.

It is true that strong swarms are seldom robbed; yet this evil is liable to befall powerful swarms. We have known cases in which strong swarms, so far as numbers were concerned, have been robbed, and all

the honey, amounting to sixty or seventy pounds, has been carried off in a few days. Some bees, like some nations, do not effectually resist invaders, though they are numerous and strong.

CHEAP WINTER PROTECTION-BED FOR HARDY PLANTS.

We were induced, last fall, to try an experiment suggested by a friend for raising cabbage, cauliflower, broccoli, and lettuce plants in the latter end of the season, and protecting them during the winter for early spring planting, without the use of sashes or shutters.

They are thus constructed: on a southern exposure, with a slight declivity, ridges are raised fifteen inches high and eight feet apart across the declivity. The seeds are sown in the beds between these ridges, and when well up, are either trimmed or picked out to the proper distance apart, (we have tried both,) and lima bean poles are then laid across the beds on the ridges at about six inches or less apart, being, of course, lengthwise with the declivity. These poles are then covered with pea brush, and finally with a coating of salt hay or straw. This arrangement prevents the frequent freezings and thawings of our changeable climate; and thus far (March 6th) the plants are in good order and ready to be planted out as soon as the weather is settled.

Part of these plants were put out in places last fall, in time to establish themselves, take root before severe frost, each being covered with a wooden box, which cost three and a half cents, and will last many years, and protected as described at the close of our article "Kitchen Garden," under the head "Work to be done from March 15th to April 15th."

These boxes will come off in time to be used for cucumbers, melons, &c., and each of them will answer all the purposes of a hand-glass if desired, by laying a pane of glass on top: covered with millinet, they effectually keep off flyers. — *Professor Mapes.*

FATTENING BEEF AND PORK.

Whenever I see a farmer peddling half-fatted pork, I ask the age of the hogs. Strange as it may seem, such animals have generally starved through two or three winters; and it requires no exercise of faith to believe the farmer's story, that it took fifty bushels of ears to get them started, or on the lift. The science of making the most pork with the least feeding, is to keep the hog growing from the start given him by his mother's milk. 'Twas but the other day that I saw a farmer who disports himself of one hundred and fifty all arable alluvial acres, hawking about a few quarters of lean cow beef: am I in the wrong for saying that I instinctively felt as though all the fat of that animal had been lost, without one cent of corresponding gain to the farmer. I once knew a farmer who suffered his sheep to eat out of one side of a stack of hay, when it fell over and crushed several sheep to death. This farmer averred, with a smile, that the surviving sheep were enough better for their extra feed to compensate him for their loss! But the man who essays to fat a half-starved animal from fall to Christmas, has not even the excuse of the sheep story. — *Genesee Farmer.*

STIFF DISORDER IN HORSES.

Messrs. Editors: As I have had, in the last two years, some experience in the treatment of the disease among horses, commonly known by the name of *stiff disorder*, I send you my mode of treatment.

It will not be necessary for me to go into a minute description of symptons, as they are very correctly described (in the main) by J. J. Rosseau, p. 126, vol. vii., of the Prairie Farmer. The first symptom that the horse shows, that is discernible to the common observer, is a stiffness in the hind parts, with the extension of the main muscle that runs up in the groin; and if the disease is attended to before it gets any further advanced — a strong decoction of butternut bark (or perhaps it will be better known by the name of *white walnut*) given one quart at a time, once in twenty-four hours, for three times, with a tablespoonful of sulphur given eight or ten hours after each dose of the bark juice, will be sufficient to put the horse in a healthy condition. But when the disease is further advanced, the horse must be bled from one quart to three pints once in twenty-four hours, two or three times, (the number of times depends on the severity of the case,) and the decoction once every twelve hours for four days, and not give the sulphur till done bleeding, and then give once a day, together with a teaspoonful of saltpetre.

This mode of treatment, I have tried in several cases, and it has proved effectual in every instance. During the treatment, the horse must be kept on wheat bran, with a small sprinkling of oats. Then turn him out, and let him go five or six weeks, and he will be as good as ever.

E. P. W.

Elmore, Peoria Co., *Jan.* 1849.
— *Prairie Farmer.*

TO PREVENT THE RAVAGES OF THE CUT-WORM.

Most gardeners have experienced a great deal of vexation from the destruction of their plants by the cut-worm. The cabbage plant appears to be in special favor with these destructives. They are much more abundant in southern gardens, I think, than at the north, and in many gardens the plat devoted to cabbages has to be often almost entirely replanted. There is a simple and efficient preventive, which requires only to be known to be universally practised when necessary.

On the site of your intended row of plants dig a narrow trench, three or four inches deep, and in the bottom of this trench set your plants as usual, and the cut-worm will not go into the trench to injure the plants. The experiment was fully tested by the writer the past summer, and proved perfectly satisfactory. When the plants have become a little stout, and able to resist the enemy, the earth must be gradually gathered about them, until the whole plat once more becomes a level. The plants will head by this mode of culture quite as well as by any other. I have left about half of the plat at times, to be set in the old method, and from one third to one half of the plants have been destroyed, while not one in the trenches has been injured in the least. I had but little faith in the plan when first pointed out to me; but repeated experiments have satisfied me that it is an efficient one. I don't pretend to give the reason of the thing, though I am convinced of its efficacy.

WILLIAM N. WHITE.

Athens, Georgia.
— *Albany Cultivator.*

TO DESTROY THE STRIPED BUG, ETC.

Messrs. Editors: To destroy striped bugs and other insects, a brood of fifteen or twenty chickens, in a small garden, will keep it free from the above named ravagers. The brood should be hatched about a week before the vines and plants come up. The hen should be secured in a coop near the centre

of the garden, with spaces for the chickens to go in and out; it would do you good to be up as soon as light, and see the little busy bodies drawing the worms from the cabbage roots, or the bugs from their hiding-places among the vines. I have used the above remedy for several years with complete success.

I am wintering 160 or more fowls, and intend to raise 12 or 1500 chickens, and I reckon bugs and worms won't trouble my garden much. I find fowls the most profitable stock kept on a farm: my hens have laid between 19 and 20 hundred eggs (and that too without any fresh meat to feed on) since the first of December up to this date. A gentleman from Fort Edward, that was wintering 5 to 600 fowls, called, in my absence, to buy eggs for his own family use: was it not laughable? I have kept an account with my fowls, and find myself in debt to them. The more I feed, and the more pains I take to pay them, the more I get in debt; and finally, after three or four years, I find myself so involved, that I kill off my creditors, and send them to the city to be dissected.

S. O. CHAFIS.

KINGSBURY, *March* 3, 1849.
— *Pennsylvania Cultivator.*

ANALYSIS OF CABBAGES.

The different varieties analyzed by Mr. Salisbury, were the drumhead, savoy, red cabbage, cauliflower, and turnip cabbage; they all contain much water. For instance, 100 lbs. of drumhead will give 88·6 lbs. of water, and the remaining 11·4 lbs. dry matter.

The savoy contains 86 lbs. in the 100, and the cauliflower still less.

Estimated dry, the drumhead will give nearly 7 lbs. in the 100 of ashes, and the cauliflower 10 lbs. and nearly a half in 100.

Supposing an acre of land, planted to this crop, should yield thirty-six tons, as has been done; it would carry away from the soil the following amount of the following minerals: —

	lbs.
Silic acid,	2·958
Sulphuric acid,	56·134
Phosphoric acid,	63·784
Phosphorate of peroxide of iron,	5·916
Lime,	14·484
Magnesia,	17·986
Potash,	142·448
Soda,	161·772
Chlorine,	3·978
	468·450

EXPERIMENTS WITH POTATOES.

For several seasons in succession, a few years ago, we tried various experiments on our farm, in the cultivation of potatoes; one of which was for the purpose of ascertaining which was best and most economical, — to plant cut tubers, small potatoes, or those of large or medium size. It would take a longer article than we now have time to write, to give all the particulars of these experiments; but the result was, either cut potatoes or small ones produced as great a yield, and as large tubers, as medium-sized or large seed, except when the season was rather a wet and very growing one; and then, the latter produced the largest crop. The only additional value which we found in large-sized tubers over small ones was, that the decomposition of the former produced food for the growing crop. But if the season proved rather dry than otherwise, the seed would not rot; consequently it afforded no advantage to the growing crop over small seed. Judging from these experiments, all that is necessary to grow a good crop of potatoes, is, an eye, with sufficiency of the tuber attached to cause it to sprout; a good soil, or one well manured, and a growing season.

These remarks are made with reference to the absence of the rot. While this is prevalent, we think it safest to rely exclusively on planting the whole tuber, which should of course be sound, and of medium size. At the time of planting, put about a pint of oyster-shell lime directly on the seed, and then cover. All who have adopted this method, so far as we have heard, have not only been exempt from the rot, but have grown good crops of a superior quality. — *American Agriculturist.*

For the New England Farmer.

KINDNESS TO ANIMALS.

The noble horse, who toils for thee,
And does thy bidding willingly,
Endowed by God with instinct rare,
Should in thy love and kindness share.

The patient ox, who meekly bows
Beneath the yoke, and daily ploughs
The rugged field, should surely be
Repaid with tenderness by thee.

O, spare the lash! remember, they
Have not *thy* gift — bright reason's ray;
Be gentle to the helpless brute —
Kindness is heaven's own attribute.

LEBANON, CT. E. C. L.

THE OLIO.

Agriculture, like the leader of Israel, strikes the rock — the waters flow, and the famished people are satisfied.

Afflictions are the same to the soul as the plough to the fallow ground, the pruning-knife to the vine, and the furnace to the gold.

Many who find the day too long, think life too short; but short as life is, some find it long enough to outlive their characters, their constitutions, and their estates.

"I wonder what makes my eyes so weak," said a loafer to a gentleman. "Why, they are in a weak place," said the latter.

Knowledge is power, as the dandy said when he stopped the dogs from fighting (which none others could separate) by applying snuff to their noses.

Let your fireside be a Paradise.

Laziness begins in cobwebs, and ends in iron chains.

TERMS. — THE NEW ENGLAND FARMER is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be neatly bound at 18¾ cents, or elegantly bound in muslin, embossed and gilt, at 25 cents a volume. As it is stereotyped, back numbers can be furnished to new subscribers.

THE POSTAGE

On this paper is only 1 cent, or 26 cents a year, within the state, or within 100 miles out of the state; and 1½ cents, or 39 cents a year, beyond those distances.

STEREOTYPED AT THE
BOSTON TYPE AND STEREOTYPE FOUNDRY.